



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yukuo KATAYAMA

Group Art Unit: 3749

Application No.: 10/538,807

Examiner: K. RINEHART

Filed: June 13, 2005

Docket No.: 124237

For: METHOD FOR FEEDING A MIXTURE COMPRISING A BURNABLE SOLID AND
WATER

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

A Notice of Appeal and Petition for Extension of Time are attached. Applicant respectfully requests review of the Final Rejection mailed May 1, 2007 in view of the arguments set forth in Applicant's August 30, 2007 Request for Reconsideration After Final Rejection ("Request") and in view of the Examiner's comments in the Advisory Action mailed September 18, 2007.

This review is requested specifically to address what Applicant believes is an overly broad construction regarding what U.S. Patent No. 4,153,427 to Bissett et al. (hereinafter "Bissett") can reasonably be considered to have suggested with regard to the subject matter of the pending claims, particularly in view of Applicant's specific acknowledgement of the inadequacies of Bissett in the Background section of Applicants disclosure. Additionally, Applicant respectfully requests review of the standard for obviousness that is applied as indicated in the rebuttal to Applicant's arguments asserted in the Advisory Action.

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Specifically, the Advisory Action states "[t]he Examiner does not believe that it is unreasonable for the nozzle of Bissett, as discussed in a reference, to read on these broad claim limitations." Applicant believes that the assertions made in the Office Action, and as reiterated in the Advisory Action, require (1) unreasonably, overly broad interpretation of the combination of specific features positively recited in the pending claims, (2) ignoring Applicant's disclosure in which the shortfalls of configurations such as Bissett are discussed, and (3) overlooking portions of Applicant's disclosure where specific advantages of the recited configuration are enumerated.

I. Bissett Cannot Reasonably Be Considered to Have Suggested the Combinations of All the Features Positively Recited in the Pending Claims

Claims 1-7, 9-18 and 21-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Bissett, and claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Bissett and further in view of U.S. Patent No. 5,657,704 to Schueler.

In Applicant's August 30 Request, Applicant respectfully traversed these rejections asserting that Bissett could not reasonably be considered to have suggested at least the features of an inner diameter of the pipe in the heater that becomes larger gradually or stepwise along a direction of the flow of the mixture, so that the water in the mixture is gradually or stepwise converted into a form of steam. The Office Action and the Advisory Action both assert that the nozzle of Bissett (element 36) can reasonably be considered to at least have suggested such a feature, apparently relying on the depiction in the figure. It is well established that when a reference does not disclose that the drawings are to scale and/or is silent as to dimensions, arguments based on the measurement of drawing features are of little value. In other words, proportions of features in a drawing may not be relied upon to show particular sizes or configuration if the specification is completely silent on the issue.

With regard to element 36 shown in the figure, the disclosure of Bissett at col. 4, lines 15-24 asserts that "[t]o effect the desired blending or mixing of the slurry and steam within the inlet end of the entrained bed dryer, a suitable nozzle arrangement, such as generally shown at 36, may be employed. This nozzle is preferably of the type wherein the steam and cold slurry are injected from the nozzle into the chamber along separate but intermingling paths such as provided by a swirling-type nozzle so as to provide the intimate blend of the steam and slurry immediately upon entering the entrained bed dryer."

It is unreasonable, given the totality of the above disclosure, to assert that the nozzle depicted and described of Bissett would have suggested a feature of an inner diameter of the pipe in the heater that becomes larger gradually or stepwise along a flow direction of the mixture, so that the water in the mixture is gradually or stepwise converted into a form of steam. Such a conclusion requires an overly broad construction of the specifically recited claim features and an overly broad construction of Bissett.

II. The Subject Matter of the Pending Claims Is Directed at Overcoming Shortfalls in the Bissett Apparatus

In the Background Section of Applicant's disclosure, specifically at page 3, lines 8-15, Bissett is discussed as an application in which a cold water mixture is heated and separated into gas and solid in a flash dryer vessel, and then pulverized coal is fed to a gasification reactor. Bissett is recognized as having pulverized coal obtained in the gas-solid separation not being completely dried out. Therefore, Applicant's disclosure indicates, the pulverized coal coagulates so that a continuous feeding to the gasification reactor is difficult. It is noted that the method of Bissett has not been put to a practical application. Applicant's disclosure goes on to discuss that the subject matter of the pending claims is directed to a method for feeding a mixture comprising a burnable solid and water to a combustion furnace or gasification reactor wherein at least a part of the water in the mixture is converted into a form

of steam with all the other features as are positively recited in the pending claims. Specifically, the shortfall in the Bissett apparatus are, is therefore recognized, and the subject matter of the pending claims is intended, among other objectives, to overcome those shortfalls.

In this application, the Appellant recognizes the shortfalls of Bissett. While Bissett may provide an indication of the problem, the unique solution arrived at by the Applicant in the claimed subject matter would not have been obvious in view of any disclosure of Bissett. One of ordinary skill in the art, for example, recognized that Bissett could not be put to practical use. A unique, non-obvious structure overcome these shortfalls, as recited in the pending claims, would not have been suggested by Bissett. In other words, there would have been no reasonable expectation of success in modifying the Bissett apparatus in the manner suggested. The only manner by which such a conclusion can be arrived at is through the improper application of hindsight reasoning based on the road map provided by Applicant's disclosure.

III. The Advisory Action Provides Broad Rebuttals Regarding Applicant's Specific Arguments Over Bissett That Are Not Supported by the Bissett Reference.

As indicated above, the Advisory Action attempts to rebut the arguments posed in Applicant's August 30 Request by simply asserting that the Examiner does not believe it is unreasonable to construe Bissett in the manner that he has. This broad statement, Applicant believes, must ignore significant portions of Applicant's arguments over the Bissett reference beginning at page 2, line 16, of Applicant's August 30 Response, and specifically, the discussion beginning at page 3, line 5, where Applicant argues that the nozzle cannot reasonably be construed in any manner that would have suggested to one of ordinary skill in the art the positively recited claim terms for which the Final Rejection and the Advisory Action rely upon that reference as teaching. Applicant requests review of the significant

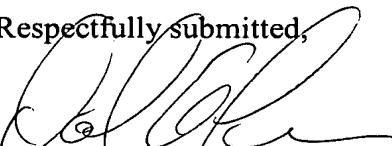
discussion regarding the ineffectiveness of attempting to argue that the nozzle 36 of Bissett corresponds to Applicant's positively recited claim features found in Applicant's August 30 Request at pages 2-5.

IV. Conclusion

Applicant believes that, upon review of the Final Rejection, Applicant's August 30 Request and the Advisory Action it will be clear that the rejection of the pending claims under 35 U.S.C. §103(a) as being unpatentable over Bissett is in error.

Applicant respectfully submits, therefore, that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-7, 9-18 and 20-24 in addition to the indicated allowable subject matter of claims 8 and 19 are earnestly solicited.

Should the Review Panel believe that anything further would be desirable in order to place this application in even better condition for allowance, all inquiries may be directed to Applicant's undersigned at the telephone number set forth below.

Respectfully submitted,

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ATTACHMENTS:

Notice of Appeal
Petition for Extension of Time

WPB:DAT/cfr

Date: October 25, 2007

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